Health Impacts Subgroup—Meeting Four Minutes
October 20, 2020
Virtual Meeting via Webex
https://www.youtube.com/watch?v=Bfv3yw3_ptc

**Meeting Attendees**
Asst. Sec. of Health and Human Resources Catie Finley, on behalf of Sec. Daniel Carey
Dep. Sec of Agriculture and Forestry Brad Copenhaver, on behalf of Sec. Bettina Ring
Jenn Michelle Pedini, Executive Director, Virginia NORML
Ngiste Abebe, Director of Public Policy, Columbia Care
Nour Alamiri, Chair of the Community Coalitions of Virginia (CCOVA)
Annette Kelley, Deputy Executive Director of the Board of Pharmacy, Virginia Department of Health Professions
Michael Carter, VSU Small Farm Outreach Program and 11th generation farmer
James Hutchings, Toxicology Program Manager at Virginia Department of Forensic Science
Nicky Zamostny, Deputy Secretary of Public Safety and Homeland Security
Secretary Moran, Secretary of Public Safety and Homeland Security (joined for part)
Heather Martinsen, Virginia Association of Community Services Boards
Nate Green, Virginia Association of Commonwealth's Attorneys
Dr. Sam Caughron, Charlottesville Wellness Center Family Practice

**Assistant Secretary Catie Finley called the meeting to order at 11:00 am.**

**Brad Copenhaver did an attendance roll call.**

**Asst. Sec. Finley did a roll call vote to approve the minutes from the last subgroup meeting October 14, 2020.**

**Natalie Hartenbaum, M.D., President at CEO at Occumedix began presentation.**

Natalie is an occupational medical therapist, past president of the American College of Occupational and Environmental Medicine (ACOEM) and current chair of its Marijuana Task Force. Her remarks today are <u>not</u> on behalf of ACOEM.

<u>She reviewed key issues related to cannabis use and employment issues including</u>:

- Employee/employer protections
    - Medical and recreational use changes what is permitted. When we look at medical, there disability issues that need to be considered. How do you define what is acceptable? For recreational, only one state and one city have really limited what employers can do when it comes to recreational. Medical falls under disability umbrella, so you have to say what is a reasonable accommodation and provide employee protections.
- On duty/off duty
    - This is challenging because unlike many other substances, you don't know the duration of impact.

- Safety sensitive positions
    - Some states let the companies define safety sensitivity, which means impairment for any reason will lead to significant safety and environmental concerns. Some states have defined, some have given broad categories then left to employer, and some have left solely to employer. Some state have set parameters around what you can do (e.g. drug testing) in those positions.
- Workers compensation
    - As she said earlier, marijuana is so different than other substances. With alcohol, we know the onset of action, how long it is in the system. We know how to measure the amount of alcohol in the system, and can extrapolate that back to determine when and how much was consumed. This is not the case with cannabinoids because there are hundreds of different compounds.
    - There is a challenge at the Department of Transportation (DOT) right now, because current federal drug testing laws allows for testing of THC-9, but not every single cannabinoid. THC-8 is included in some products and is not being picked up, even though it is intoxicating. A number of things, including how you consumed marijuana, can impact how long it is in the system and how quickly the impact it and how it is measured.
    - For workers compensation – what is covered can be controversial. Depending on the literature you read, there are certainly some conditions where medical cannabis is helpful. For many of those conditions, you don't want that individual performing certain tasks in the workplace anyways because the condition itself may also be impairing. Has cannabis been shown to be effective for pain and, if so, what dose is appropriate and how often should it be used? If it needs to be used for a medical condition, do they need to use it on duty?
- Conflict with federal law (DFWP/DOT) -- Federal drug-free workplace program requires a drug-free workplace for entities receiving federal grants, but does not require drug testing.
    - On the other hand, DOT does require drug testing and does include marijuana as one of the 5 tested substances. There are a number of trucking companies who are also doing hair testing, which is not required in federal law at this time. What if the operator tests positive under hair test (which can be problematic) under state law but positive on a urine drug test?
- Impairment – This can be difficult to measure, since blood levels do not necessarily correlate with impairment. There are no specific dosing intervals or components in marijuana. Even cannabidiol oil can be THC free or, depending on the state, can have a significant amount of THC. So again, you can't just set an hour limit after consumption and assume they are no longer impaired.
- Drug testing
    - Not all cannabinoids are picked up in drug testing mechanisms that are currently used.
    - Just pre-employment? Random? What kind of testing? Urine is usually short window, but not for marijuana.
- Per se levels -- Blood and plasma levels do not necessarily correlate with impairment and are subjective.
- Duration of effect -- Difficult to know because every product is different.

- CBD – "Kind of" legal at the federal level. Legal if grown, prepared, cultivated and sold consistent with federal law – can't have more than .3% by weight of THC, can't promote health benefits, can't be added to food currently.
    - Some states have permitted a higher percentage of THC in their CBD, which is then is challenging because low-THC products can add up and don't know how much active ingredient in one teaspoon, etc.

Bottom line: There is so much we don't' know and don't have the info to figure it out at this time.

<u>She showed a list of states with employee protections and discussed key similarities and differences</u>:

https://www.ncsl.org/research/labor-and-employment/cannabis-employment-law.aspx.

- Illinois says employers can adopt reasonable drug testing policies and defines specific way to identify impairment (e.g. symptoms that lessen performance of duty).
- Employer protections give parameters, but it is important to not overly limit them because they have a significant amount of responsibility to have a safe and healthy workplace.

- Prohibiting use at work – almost all states, regardless of whether state has employee protections.
- Prohibit being impaired at work – problem is that measuring that is almost impossible. After an accident is too late; employee also may not be impaired at the beginning of the day when they are first tested. One reason for drug testing under federal law is deterrence.
- Differ on testing/action for positive test
    - Must consider pre-employment, hair testing, medical cards that have expired, etc. Can the employer take action immediately on the test? What if they have medical marijuana card? Is it based on an accident or reasonable suspicion?
    - Hair detection picks up THC much longer after consumption.
- Differ on off-duty use (including for safety sensitive)
- Differ on possession at workplace – almost all agree they can't have products or paraphernalia at workplace, but can it be in their car?
- Differ on accommodation
    - Some laws re: definition of reasonable accommodation working their way through courts now, but there is no established right answer.
    - Important to remember that employers have a responsibility to ensure safety for all employees
- Differ on whether and how safety sensitive is defined
- Differ on measurement of impairment – generally slurring words, making mistake OR clearly under influence (e.g. dilated pupils, can't walk, test positive)

Bottom line: Impairment more broadly has been looked at for years and there is no right answer.

<u>Tools to measure impairment:</u>

- Police training, since advanced roadside impairment detection tools not always accurate in every state.
- Oral fluid appears to be reasonable.
- Breath not ready for prime time.
- Alert O-meter, Get BlueSky, etc., which has folks do tasks and measures against individual baseline, but not always look at marijuana (just impairment generally).
    - This gets back to use of testing for both measurement and deterrence. We don't want folks using certain drugs at work if they are impairing.
- Right now, she thinks it has to be up to the employer. We are not saying employers can't test for high-dose morphine and other legal substances that can be impairing, so we don't want to treat marijuana differently just because it has some medicinal benefits. The employer should be able to say that you can't use a reasonable time before coming to work, because of the risk of impairment.
- Oral fluids good breath is better, don't have that method yet. Blood is difficult depending on what they are testing. Urine is bad and hair is a mess. Some truck drivers do use hair testing, recognizing that is can recognize THC long after impairment, so it is used as deterrence but folks get a second chance if test positive.

She reviewed states with marijuana-impaired driving laws, and noted that evaluating impairment is still a major challenge, including whether they're measuring the presence of a cannabinoid or impairment, looking at saliva vs. breath, etc.

- THC concentration goes down while an individual may remain impaired (see slide).
- Detecting impairment varies by the method -- breath seems to work better than an oral fluid.

<u>Summary:</u>

- Every strain of cannabis is not the same. Edibles have to go through the liver first. (see slide for list of variables). A number of organizations, including ACOEM, have been trying to encourage Congress to remember that it is an impairing substance and we don't know how to measure impairment.
- Safety sensitive positions are the most important. Health and safety should not be jeopardized regardless of the reason for impairment.
- We don't currently have validated tools that will hold up in courts or identify impairment before it is too late.
- We know there is a relationship between blood THC and impairment, we just don't know what that is.
- Safety sensitive definition should be left to the employer, thought it is fine to give parameters and basic definitions. ACOEM tried to identify some of those.
- Given lack of research, currently no level of cannabis is safe in those safety sensitive positions in workplace environments.

Dr. Caughron: Is there any research on products that could reverse the effects of marijuana in the human body?

- She is not aware of anything like that (e.g. naloxone for opioids.)
- Again, we don't know what happens and what is in any given joint.

Dr. Caughron: At some point we have to make a legal decision without perfect data. What other states have been doing well?

- Ms. Hartenbaum: Oklahoma (Unity Act) and Illinois have done a good job.
- Most important thing is to keep in mind that safety sensitive positions are different. If you cannot use an impairing medication because of your job – this should not be any different. Beyond that it comes down to performance, and the employer has a reasonable right to expect a person to do their job with or without a reasonable accommodation. It also depends on why they are using in first place (e.g. need it medically.) A lot of this is also education and learning.

Dr. James Thompson: Are state determinations regarding impairment meaningful?

- Ms. Hartenbaum: Depends on how the product was consumed, and impairment is not always measured by presence of THC. The person's blood level may go down when they are still impaired. It also depends on whether measuring metabolite or compound.
- Edibles take longer to kick in, and folks sometimes take two and they kick in all at once
- Breath tests are probably the best but they aren't available yet. Best now is oral fluid, but how is that practical in the workplace.
- We do test of oxycodone, codine, etc., partially as a deterrent in federal drug testing program (and those are legal).
- It is appropriate to use in certain circumstances, e.g. if marijuana comes up in pre-employment test, she recommends giving them a second change later in time, especially if it is legal in that location.
- Medical also different - does it get them to be able to do their job safely or does it impair them. Chronic pain patients cannot do every job because maybe impaired by narcotics. We aren't looking at marijuana as a "bad drug," more recognizing it is impairing (effects judgment and performance) and that we don't have tools to say if you smoke this a certain amount of hours before it does or does not affect muscle spasticity, fatigue, etc.

Ms. Finley: Is there a common way that this is handled for healthcare providers and teachers?

- Ms. Hartenbaum: For example, NYC prohibits pre-employment marijuana testing except for safety-sensitive positions. They prohibit it with the exception of policy officers, investigators, folks covered by building codes, positions requiring a commercial drug license, positions involving supervising or caring for children, supervising medical patients, supervising vulnerable populations, active construction site, heavy machinery, operate a motor vehicle, airplane inspection, etc. So those give an idea of things that may allow drug testing.
- It comes down to whether you are putting other individuals and environment at risk, and broad definitions of what are inclusive in safety sensitive positions would be helpful.

Asst. Sec. Finley reviewed Dr. Thompson's point from the last meeting that cannabis disorder is a disease, there's evidence that legalization can lead to an increase in this disease, and that treatment is necessary. Dr. Thompson then shared a presentation around addiction.

Dr. Thompson (also see slides):

- Toxicity is not necessarily key, as it can be fairly low for cannabis as compared to other substances. It is about a brain disorder that can be fairly unpredictable in people who engage in any kind of substance use.
- Genetics are the strongest predictor.
- A 2019 study looked at changes in use and substance use disorder in states where recreational use was legalized. It found a small increase in cannabis use disorder among youth, though use did not go up significantly. It also found that frequent users among adults increased.
- It is important to find evidence-based prevention programs, because not all prevention programs work.
- Treatment is critical, and only about 10% who meet the criteria for substance use disorder get treatment nationwide.
- Addiction is primary illness, not a symptom of any other illness (not a maladaptive way of coping with stress) and must be treated as such. ASAM definition on slides.
- Historic prevalence of SUD, including Cannabis Use Disorder (CUD), is about 8.5% of Americans.
- Since genetics is the strongest contributor, we can't simply address SUD by mitigating contributing factors. It must be treated.
    - One contributing factor that can be mitigated is use, so that is why prevention is important.
    - Not really danger of cannabis use specifically but more that those who use it will experience a reordering of their priorities and ability to control use
- JAMA study November 2019 (see slide) compared legalized states to non-legalized states and found:
    - Prevalence of CUD among teens was higher (2.13%, increased to 2.72%, 2008-2016). That would be about 11,000 Virginia teens with CUD over 8 years.
    - While the disorder went up, frequency of use did not go up.
- Frequent use among adults went up about .5%, so about 30,000 adults in Virginia population. (Increase in incidence was about .3%, so not as significant.)
- The American Society of Addiction Medicine (ASAM) is not for or against legalization, but instead say need to look at the potential problems and find ways to mitigate them.
- He has learned a lot about the safety and prevention/education, but wanted to provide context from his field about the relative benefit of prevention compared to treatment. Both are important and ASAM's mission includes prevention, research and treatment, but it is interesting to see cost-benefit treatment vs. prevention:
- A SAMHSA meta-study showed that prevention efforts directed at youth have the biggest return on investment, with 4% of youth delaying (about 2 years) or never using cannabis. It found a total reduction of about 11.5% present users, so definitely worth it.
    - While return on investment is hard to measure, he saw a study that showed a $1:$30 ROI for prevention.
    - Prevention needs to be evidence-based to be fully effective.
- Only 10% of those who meet criteria for SUD get treatment nationwide, even though the disease is almost as prevalent as diabetes.
- This work group has talked a lot about social justice and SUD/CUD treatment dramatically reduces the rates of recidivism. Justice Bureau statistics show about 55%

prevalence of SUD, so a lot of crime that leads people to incarceration, whether it is possession or distribution, is driven by SUD.

Dr. Caughron: With the genetic issue as a predominant driver, if don't seek marijuana they will seek something else. Can we work prevention and treatment into the legalization law, instead of being separate from it? CUD will not be the one to worry about.

- Dr. Thompson: Oregon Measure 110 built in laws and penalties for drug related issues. It reorders the level of misdemeanor for possession and then attached an SUD assessment to any person arrested for a drug related issue as part of the law change. He thought that was helpful and interesting.

Dr. Caughron is concerned about youth taking drugs and criminalizing this. He would like to see that mitigated in the structure of the law.

- Dr. Thompson: Agreed, an important message is that substance use-related problems are more of a sign of illness than a law-breaking nature. Referral to assessment and treatment is the right reaction to youth using drugs.

**Asst. Sec. Finley reviewed draft subgroup recommendations.**

- First, discussed the need for collecting baseline data to help understand potential impact.
    - Mr. Moran: Can we define what impact, data we're trying to collect and from whom?
- Consumer education regarding responsible use is critical.
    - Mx. Pedini: Clarify medical cannabis (marijuana is used explicitly in criminal code).
    - Ms. Abebe: Thinking about standardized packaging, help consumers identify have a QR codes to help consumers know they are at a legal cannabis operation.
    - Ms. Alamiri: For products that are multi-use, making sure there's child-resistant packaging.
- Use of high potency products make individuals more susceptive to abuse such as cannabis use disorder.
        - Asst Sec. Finley summarized Nevada model, which limits per package and per sale. Her understanding from Americans for Safe Access is that is a pretty common way of approaching THC limits.
        - Dr. Caughron: Recognize there are other THC components e.g. THC-8 and THC-9.
    - Ms. Abebe: High concentration does not necessarily mean high consumption. For example, vape cartridge might have 90% THC but it is supposed to be for hundreds of doses over a significant period of time. (for example, vaping products). Topline statement does not reflect the nuance of how use disorders correlate with concentration, so perhaps "clear understanding of THC amounts is critical for responsible consumption" and "looking at the per-dose, per-serving, per-sale are the best way to go." Potency caps are based on "worst case" headlines. People use products differently so THC caps are subjective.
    - Mx. Pedini: Agreed, need to speak to identifying and clearly labeling products and serving sizes.
    - Dr. Thompson: I understand what Ngiste is saying and also what Asst. Sec. Finley may be trying to get at. It is true that generally with drugs of abuse high potency

dosing does increase risk of development of substance use disorder. Maybe can clarify to focus on potency of dosing as opposed to the product the person would buy.
    - Asst. Sec. Finley: Does the first bullet get at it? Focusing on per-dose, per-serving THC limits in addition to standard per sale limits.
    - Ms. Abebe: It is important to be specific with formats, since it is much easier to establish per serving limit for something like an edible. For the consumer, it is most important to be specific about what you are experiencing and when you will expect onset (e.g. fast-acting tinctures absorbed through capillaries or smokable flower much faster vs. edibles which have to go through the digestive system.) She has not seen per dose or per serving applied to those types of concentrates or flower, but instead to edibles.
        - When we talk about sub-lingual tinctures, you can still require clearly marked measurements so you know how much to take per amount. We should focus on what is implementable for businesses and useful for consumers. A per serving THC limit does not translate well to inhalable products. She is also not sure how it would be done with tinctures, because the dose is so small it would be hard to package into a serving size.
    - Ms. Alamiri: The modes of use dictate packaging. Something that was mentioned earlier is the single-serving packaging helps avoid child emergency room visits based on accidental consumption. Instituting a dispensing limit for certain products, instead of all products, may be an approach.
    - Ms. Abebe: Most places have a translation limits that tracks with a certain ounces of flower and then and translates that to milligrams per THC for an edible or tincture format.
- Cannabis use disorder is real, and legalization will increase and change the demand for substance use disorder treatment.
- Prevention and education is critical.
    - Dr. Thompson: Hard to know who is predisposed, so consider making everyone aware of the possibility of developing SUD. In treatment, they often confront folks who think they are as immune to the disease, which is not the case.
    - Ms. Abebe: We need a mechanism to update information while research is still emerging. For example, we know there an interaction between THC and bipolar disorder, but don't have the full mechanism of what that is or how to manage or treat that. For public health campaigns, the timeline for the review and update needs to be faster than for things like alcohol, where we have a pretty good idea of the science behind alcohol impairments. Education needs to be grounded in science with regular review built into it.
    - Ms. Abebe: Do treatment needs change after legalization because reduce stigma and reduce risk of incarceration for folks with CUD? Public outreach should include efforts to reduce the stigma around seeking behavioral health resources. It would be transformative if we could also use this as a moment to focus on our behavioral health system and how we provide and connect folks to resources and, since we are talking about social inequities and stigma, around removing barriers to access and bolstering our current system.
    - Ms. Alamari: We need to make sure those mental health supports are both accessible and affordable, which includes CSB funding.

Re: the bullet point on diversion program, based on what Dr. Thompson mentioned on rates of recidivism, we need to make sure there are comprehensive re-entry programs.
    - Age-appropriate marijuana education, investment in support for individuals 21-26.
        - Ms. Abebe: Difficult to prohibit products been seen by youth, also think through packaging and not making it attractive to youth.
        - Ms. Alamiri: Could add something about distance from schools, etc. to advertising piece.

- Reform should address and "undo" harms of criminalization when possible, including diversion initiatives, monitoring police activity data, etc.
    - Ms. Abebe: Also important to not increase risk of eviction, possibly by having safe consumption areas.
- Lack of consensus on much of the marijuana research, need to invest in additional research.
- Youth use prevention:
    - Ms. Finley will add investing in support with that target population in mind for sub-bullet 21-26
    - Ms Abebe: On marketing to youth piece: 1) Prohibit is hard, because can't guarantee no youth eyeballs will see it. We should use the normal standard of 70% adult audience reasonably expected. 2) Advertising goes beyond packaging and is also billboards, social media, etc. It is also not using cartoons, making it look like candy, or using the leaf in certain marketing formats to make products attractive to youth.
    - Ms. Alamiri: Think in Gillian presentation, some states have prohibited advertising within 1,000 feet of child or community related locations. So we should put distance limit on advertising near community centers or schools.

- Maintain Virginia's Indoor Clean Air Policy.
    - Ms. Alamiri: Maybe identify limit of physical distance from a building like is done with tobacco.
    - Ms. Alamiri: There should also be policies requiring signage for designated areas where people can use. For example, on college campuses and in schools she has seen updated signage that includes vaping. So signage should clearly identify where and what you can use.
- Asst. Sec. Finley read bullet point on the lack of consensus on data and research, and corresponding recommendation to invest in data collection and research.
- Mx. Pedini: The seed-to-sale bullet point should move under the consumer safety section.

**Dep. Sec. Copenhaver opened for public comment.**
Mary Crozier: As professional in SUD prevention, education, and treatment, we need time to develop an infrastructure for public health. This is being discussed when we have budget constraints, and there needs to be more money to address risk factors, poisonings, and other issues. Thinks we need to prolong this if we allow it at all.

Elly Tucker:  Currently a medical cannabis patient in Virginia, thinks this workgroup is essential. Suffers from anxiety, and finding relief this way has been essential. As a senior citizen, some of the packaging may be difficult with arthritic hands, and important to keep this in mind.
Paul McClean: Had conversation with retail operator in California about a bring your own cannabis business model becoming more popular. In Virginia, we have cigar humidors, and curious if this type of model for cannabis whether outdoor or indoor?

Regina Whitsett: Executive Director for a SUD organization in Virginia. Agreed with idea about QR code label on products to ensure it's from a licensed dispensary. Also, regarding density capping, important to have an opt-out clause for localities to opt-out of businesses coming to locality. Also important is a no use in public clause to prevent second-hand smoke. Regarding ids, important to confirm age at dispensaries. Also THC caps are important due to high potency doses that could be impacting people's health.

Kristi Norton: Uses medical program, has suffered from anxiety, nausea, depression, etc. This has been the only thing to help and fully supports legalization.

Asst. Sec. Finley wrapped up the meeting, thanked participants.

**The meeting adjourned at 12:59 pm.**